

## **AMENDMENTS TO THE SPECIFICATION:**

Please amend the specification as follows:

Page 4, please replace the last paragraph with the following new paragraph:

FIG. 6 is a graph showing a relationship between an amount of an electrolyte solution[[,]] and ~~the time difference between the time when the safety valve opens and the time when an inside short circuit occurs~~ a gas generation amount.

Page 5 bridging page 6, replace paragraph [0019] with the following new paragraph:

[0019] The specification of the lithium ion secondary battery 10 are shown in FIG. 2. The lithium ion secondary battery 10 has a capacity of 12Ah, and internal resistance of 1.5mΩ, as shown in FIG. 2. The outside dimension of the lithium ion secondary battery 10 is 120 mm (W) x 100 mm (H) x 25 mm (D). Since the thickness of the aluminum used for the battery case 11 is 1mm, the internal volume of the lithium ion secondary battery is 118 mm (W x 98 mm (H) x ~~43~~ 23 mm (D) = 266 ml. The dead space of the lithium ion secondary battery 10 is approximately 95 mL.

Page 8, please replace paragraph [0029] with the following new paragraph:

When the charging current is 80A, the expression is as follows:

$$y = 0.0012x^6 - 0.00674x^5 - 0.14331x^4 - 4050521x^3 + 1.050521x^3 + 8.1251x^2 - 22.042x + 309.9$$
 Therefore, the valve opening pressure x at which the time difference y is equal or longer than ten seconds is lower than 0.812 MPa.